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PATENT & TRADEMARK OFFICE

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth below:

1-12. (Cancelled)

13. (Previously Presented) A process for lubricating in the presence of metals, comprising the step of applying linear perfluoropolyethers as lubricants, where said linear perfluoropolyethers have the following structural formula:

$$T\text{-}O(CF_2O)_n(CF_2CF_2O)_m(CF_2CF_2CF_2O)_r(CF_2CF_2CF_2CF_2O)_s\text{–}T_1 \quad (I)$$

wherein:

- T and T_1 are the same or different, and are each selected from the group consisting of CF_3-, CF_3CF_2-, C_3F_7-, C_4F_9-, $ClCF_2$-, or $ClCF_2CF_2$-;
- n, m, r, s are integers such that the number average molecular weight is comprised between 700 and 100,000;
- the m/n ratio is comprised between 2 and 20;
- the (r+s)/(n+m+r+s) ratio is comprised between 0.05 and 0.2;
- the n/(n+m+r+s) ratio ranges from 0.05 to 0.40; and

wherein the perfluorooxyalkylene units are statistically distributed along the polymeric chain.

14. (Previously Presented) A process for conferring water- and oil-repellance to surfaces, comprising the step of applying linear perfluoropolyethers to said surfaces, where said linear perfluoropolyethers have the following structural formula:

$$T\text{-}O(CF_2O)_n(CF_2CF_2O)_m(CF_2CF_2CF_2O)_r(CF_2CF_2CF_2CF_2O)_s\text{–}T_1 \quad (I)$$

wherein:

- end groups T and T_1 are the same or different, and are each selected from the group consisting of CF_3-, CF_3CF_2-, C_3F_7-, C_4F_9-, $ClCF_2$-, $ClCF_2CF_2$- or $-(CF_2)_zCOF$, wherein z = 0, 1, 2 or 3;
- n, m, r, s are integers such that the number average molecular weight is comprised between 700 and 100,000;
- the m/n ratio is comprised between 2 and 20;
- the (r+s)/(n+m+r+s) ratio is comprised between 0.05 and 0.2;
- the n/(n+m+r+s) ratio ranges from 0.05 to 0.40;

wherein the perfluorooxyalkylene units are statistically distributed along the polymeric chain, and wherein the total moles of the end groups have from 0.5% by moles to 50% by moles of –COF groups.

15. (New) A process according to claim 13, wherein the number average molecular weight is in the range 1,500 - 20,000 (viscosity between 10 cSt and 1,000 cSt at 20°C).

16. (New) A process according to claim 13, wherein the perfluoropolyethers are applied with thermal stabilizers of perfluoropolyethers.

17. (New) A process according to claim 15, wherein the perfluoropolyethers are applied with thermal stabilizers of perfluoropolyethers.

18. (New) A process according to claim 16, wherein the thermal stabilizers of perfluoropolyethers comprise perfluoropolyethers having a functionality selected from the group consisting of phosphines, phosphates, phosphazenes, benzothiazoles, triazines, amines, substituted amines, or nitroderivative compounds.

19. (New) A process according to claim 17, wherein the thermal stabilizers of perfluoropolyethers comprise perfluoropolyethers having a functionality selected from the group consisting of phosphines, phosphates, phosphazenes, benzothiazoles, triazines, amines, substituted amines, or nitroderivative compounds.

20. (New) A process according to claim 14, wherein the -COF end groups are transformed into other functional groups.

21. (New) A process according to claim 20, wherein the other functional groups are selected from the group consisting of -COOH, -COOR (wherein R = CH_3, C_2H_5, C_3H_7), aminic, alcoholic, aldehydic, salts, nitrilic, or amidic functional groups.